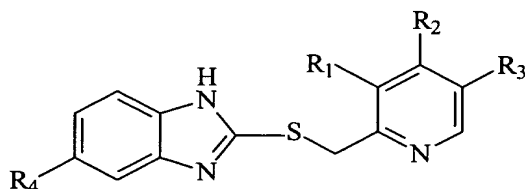


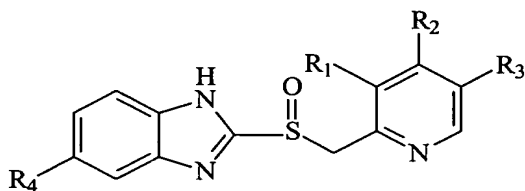
wherein R<sub>1</sub>, R<sub>2</sub>, and R<sub>4</sub> are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R<sub>3</sub> is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B



B

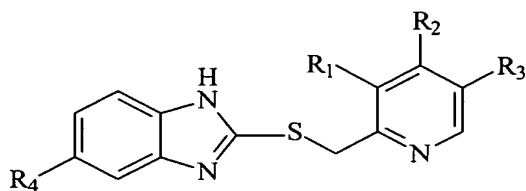
wherein R<sub>1</sub> through R<sub>4</sub> are as in formula A, with an oxidizing agent selected from the group consisting of *tert*-butyl hydroperoxide in the presence of a catalyst, OXONE<sup>®</sup> and potassium peroxymonosulfate to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

- 
4. (Amended) A process for preparing a thioester compound of formula A:
- 



A

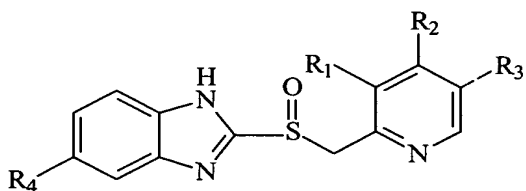
wherein R<sub>1</sub> is methyl; R<sub>2</sub> is methoxy; R<sub>3</sub> is methyl; and R<sub>4</sub> is methoxy, comprising reacting a thioether compound of formula B



B

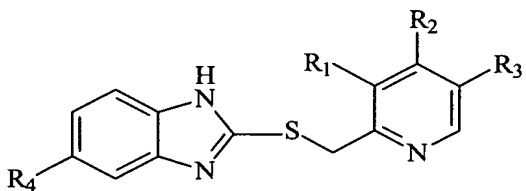
wherein  $R_1$  through  $R_4$  are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

5. (Amended) A process for preparing a thioester compound of formula A:



A

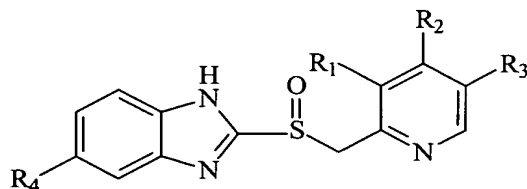
wherein  $R_1$  is methyl;  $R_2$  is 2-trifluoroethoxy;  $R_3$  is hydrogen; and  $R_4$  is hydrogen, comprising reacting a thioether compound of formula B



B

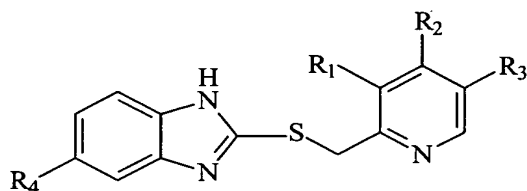
wherein R<sub>1</sub> through R<sub>4</sub> are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

6. (Amended) A process for preparing a thioester compound of formula A:



A

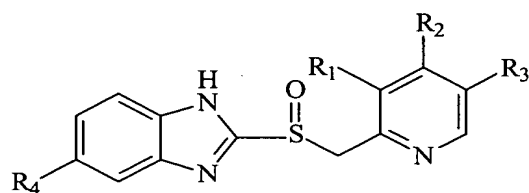
wherein R<sub>1</sub> is methoxy; R<sub>2</sub> is methoxy; R<sub>3</sub> is hydrogen; and R<sub>4</sub> is difluoromethoxy, comprising reacting a thioether compound of formula B



B

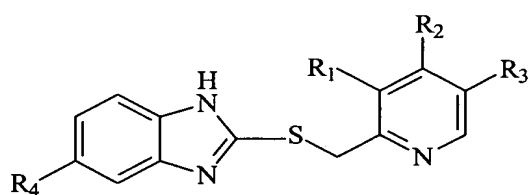
wherein R<sub>1</sub> through R<sub>4</sub> are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

7. (Amended) A process for preparing a thioester compound of formula A:



A

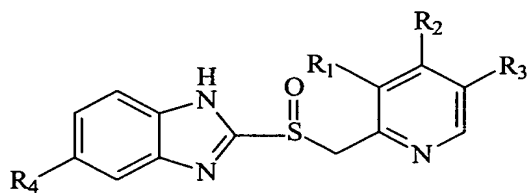
wherein  $R_1$  is methyl;  $R_2$  is  $\text{MeOCH}_2\text{CH}_2\text{CH}_2\text{O}$ ;  $R_3$  is hydrogen; and  $R_4$  is hydrogen, comprising reacting a thioether compound of formula B



B

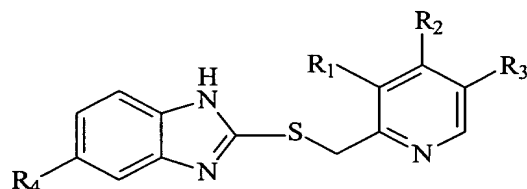
wherein  $R_1$  through  $R_4$  are as in formula A, with an oxidizing agent to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

8. (Amended) A process for preparing a thioester compound of formula A:



A

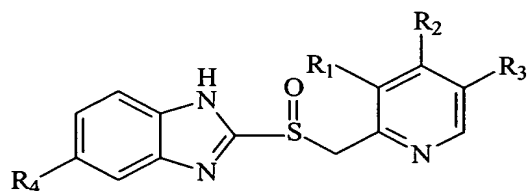
wherein R<sub>1</sub>, R<sub>2</sub>, and R<sub>4</sub> are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R<sub>3</sub> is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B



B

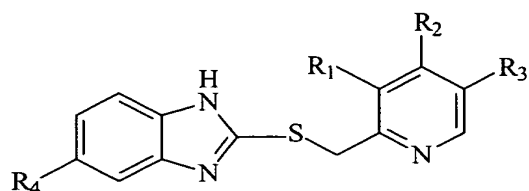
wherein R<sub>1</sub> through R<sub>4</sub> are as in formula A, with *tert*-butyl hydroperoxide in the presence of a catalyst to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A.

9. (Amended) A process for preparing a thioester compound of formula A:



A

wherein R<sub>1</sub>, R<sub>2</sub>, and R<sub>4</sub> are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and R<sub>3</sub> is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B

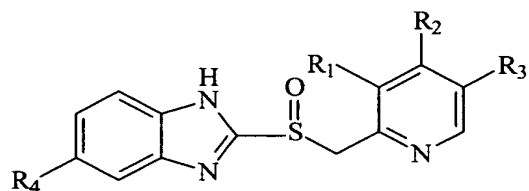


B

wherein  $R_1$  through  $R_4$  are as in formula A, with *tert*-butyl hydroperoxide in the presence of a catalyst to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A,

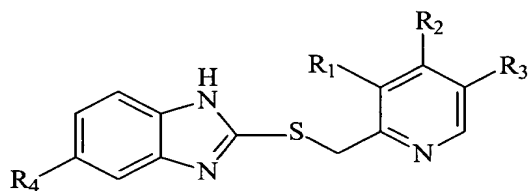
wherein the catalyst is selected from the group consisting of vanadyl bis-acetylacetonate, sodium meta-vanadate and vanadium pentoxide.

- 
11. (Amended) A process for preparing a thioester compound of formula A:



A

wherein  $R_1$ ,  $R_2$ , and  $R_4$  are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and  $R_3$  is selected from the group consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B



B

wherein  $R_1$  through  $R_4$  are as in formula A, with *tert*-butyl hydroperoxide in the presence of vanadyl bis-acetylacetonate to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A,

12. (Amended) The process of claim 11, wherein the vanadyl bis-acetylacetonate and the compound of formula B is in the molar ratio of about 0.01 to about 0.6.

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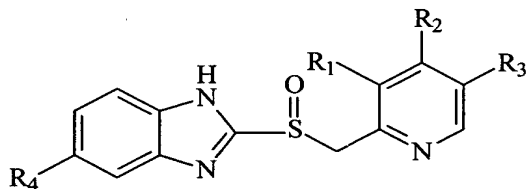
16. (Amended) The process according to claim 1, wherein the oxidizing agent is OXONE<sup>®</sup>.
17. (Amended) The process according to claim 16, wherein the molar ratio between OXONE<sup>®</sup> and the compound of formula B is about 1.25-1.6 to about 1.
18. (Amended) The process according to claim 16, wherein the molar ratio between OXONE<sup>®</sup> and the compound of formula B is about 1.4-1.6 to about 1.

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20. (Amended) The process according to claim 16, wherein the oxidation is performed in the presence of at least one solvent wherein the solvent is selected from the group consisting of acetone, methanol and a mixture thereof.

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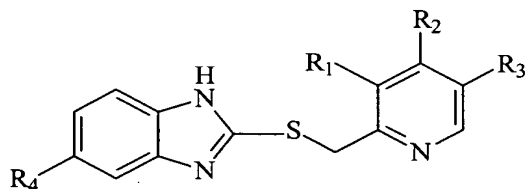
22. (Amended) A process for preparing a thioester compound of formula A:



A

wherein  $R_1$ ,  $R_2$ , and  $R_4$  are each selected from the group consisting of hydrogen, substituted or unsubstituted lower alkyl and substituted lower alkoxy; and  $R_3$  is selected from the group

consisting of hydrogen and substituted or unsubstituted lower alkyl, comprising reacting a thioether compound of formula B



B

wherein R<sub>1</sub> through R<sub>4</sub> are as in formula A, with OXONE<sup>®</sup> to produce selective oxidation of the thioether compound of formula B to form the thioester compound of formula A, wherein the oxidation is performed in a two-phase system selected from (CH<sub>2</sub>Cl<sub>2</sub>/H<sub>2</sub>O) and (ethyl acetate/H<sub>2</sub>O).


23. (Amended) The process of claim 22, wherein the oxidation is performed in the presence of phase-transfer catalyst.
24. (Amended) The process of claim 23, wherein the phase-transfer catalyst is *tert*-butyl ammonium bromide.
25. (Amended) Omeprazole having less than about 4.5% sulfone prepared as in any one of claims 1, 4 or 8.
26. (Amended) Lansoprazole having less than about 4.5% sulfone prepared as in any one of claims 1, 5 or 8.
27. (Amended) Pantoprazole having less than about 4.5% sulfone prepared as in any one of claims 1, 6 or 8.
28. (Amended) Rabeprazole having less than about 4.5% sulfone prepared as in any one of claims 1, 7 or 8.


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**Please add the following new claims:**

29. (New) The process according to claim 1, wherein the oxidizing agent is potassium peroxyxymonosulfate.



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30. (New) The process according to claim 29, wherein the molar ratio between potassium peroxymonosulfate and the compound of formula B is about 1.25-1.6 to about 1.
31. (New) The process according to claim 29, wherein the molar ratio between potassium peroxymonosulfate and the compound of formula B is about 1.4-1.6 to about 1.
32. (New) The process according to claim 29, wherein the oxidation is performed in an aqueous solution.
33. (New) The process according to claim 29, wherein the oxidation is performed in the presence of at least one solvent wherein the solvent is selected from the group consisting of acetone, methanol and a mixture thereof.
34. (New) The process according to claim 29, wherein the oxidation is performed in about 5% aqueous methanol.
35. (New) The process according to claim 29, wherein the oxidation is performed in a two-phase system selected from  $\text{CH}_2\text{Cl}_2/\text{H}_2\text{O}$  and ethyl acetate/ $\text{H}_2\text{O}$ .
36. (New) The process according to claim 29, wherein the oxidation is performed in the presence of phase-transfer catalyst.
37. (New) The process according to claim 29, wherein the phase-transfer catalyst is *tert*-butyl ammonium bromide.
38. (New) The process according to claim 29, wherein the oxidation is performed at a temperature between about  $-10^\circ\text{C}$  to about  $30^\circ\text{C}$ .
39. (New) The process according to claim 29, wherein the oxidation is performed over a time period of about 2 to about 10 hours.
40. (New) The process according to 14, wherein the organic solvent is toluene.
41. (New) The process according to 14, wherein the organic solvent is isopropanol.
42. (New) The process according to claim 1, wherein the oxidation is performed at a temperature between about  $-10^\circ\text{C}$  to about  $30^\circ\text{C}$ .
43. (New) The process according to claim 1, wherein the oxidation is performed over a time period of about 2 to about 10 hours.
44. (New) The process according to claim 16, wherein the oxidation is performed at a temperature between about  $-10^\circ\text{C}$  to about  $30^\circ\text{C}$ .
45. (New) The process according to claim 16, wherein the oxidation is performed over a time period of about 2 to about 10 hours.

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46. (New) The process according to claim 14, wherein the oxidation is performed at a temperature between about -10<sup>0</sup>C to about 30<sup>0</sup>C.
47. (New) The process according to claim 14, wherein the oxidation is performed over a time period of about 2 to about 10 hours.
48. (New) The process according to claim 1, wherein the *tert*-butyl hydroperoxide is dry.
49. (New) The process according to claim 1, wherein the *tert*-butyl hydroperoxide is aqueous.
50. (New) The process according to claim 1, wherein the thioester compound for formula A produced by the oxidizing agent of *tert*-butyl hydroperoxide having less than about 4.5% sulfone.
51. (New) The process according to claim 1, wherein the thioester compound for formula A produced by the oxidizing agent of OXONE<sup>®</sup> or potassium peroxymonosulfate having less than about 0.5% sulfone.
52. (New) The process according to claim 1, wherein the thioester compound for formula A produced by the oxidizing agent of OXONE<sup>®</sup> or potassium peroxymonosulfate having less than about 0.2% sulfone.
53. (New) Omerprazole having less than about 0.5% sulfone prepared as in any one of claims 1, 4, 16 or 29.
54. (New) Lansoprazole having less than about 0.5% sulfone prepared as in any one of claims 1, 5, 16 or 29.
55. (New) Pantoprazole having less than about 0.5% sulfone prepared as in any one of claims 1, 6, 16 or 29.
56. (New) Rabeprazole having less than about 0.5% sulfone prepared as in any one of claims 1, 7, 16 or 29.
57. (New) Omerprazole having less than about 0.2% sulfone prepared as in any one of claims 1, 4, 16 or 29.
58. (New) Lansoprazole having less than about 0.2% sulfone prepared as in any one of claims 1, 5, 16 or 29.
59. (New) Pantoprazole having less than about 0.2% sulfone prepared as in any one of claims 1, 6, 16 or 29.
60. (New) Rabeprazole having less than about 0.2% sulfone prepared as in any one of claims 1, 7, 16 or 29.